



# OLG LAC report 2003-2006

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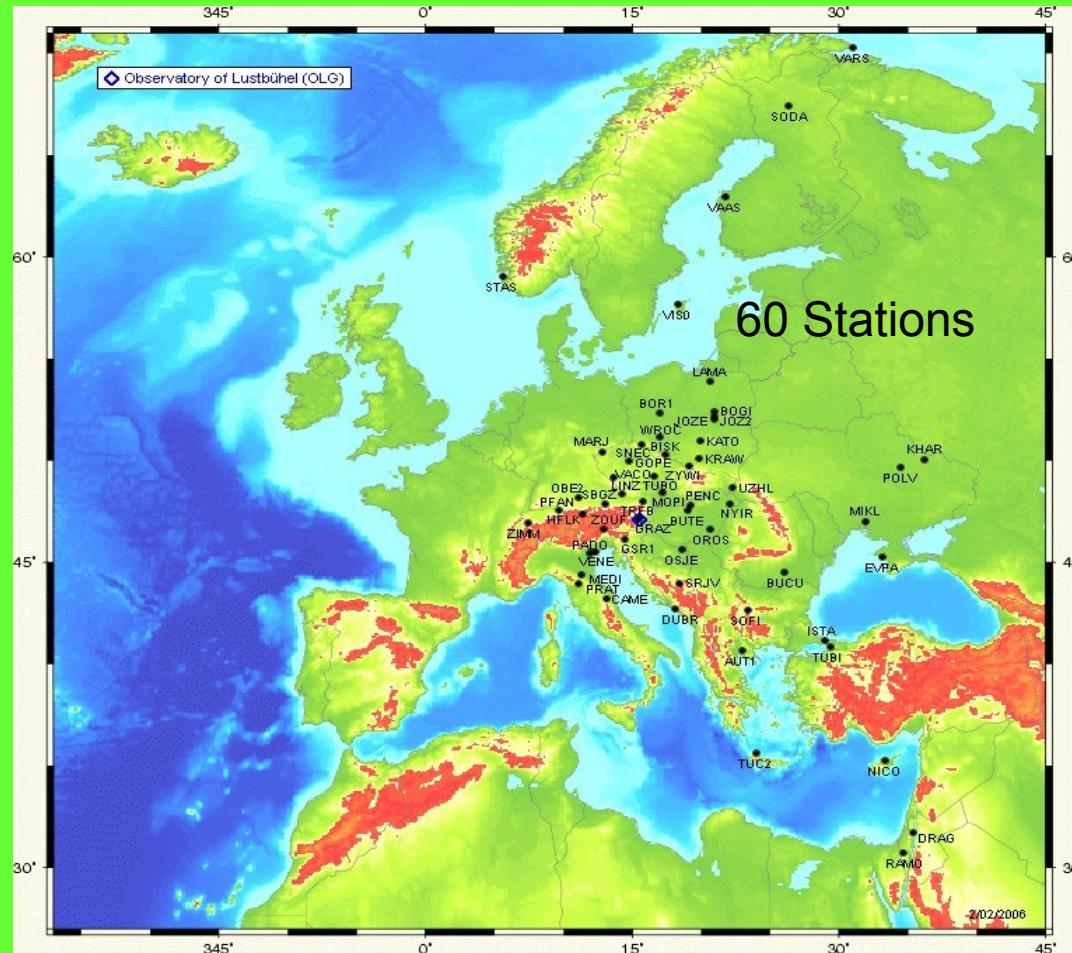
# Structure



- 3 Persons (each 50%)
- 3 Workstations (Pentium III SMP 1GB, migration to AMD Dual Core 4GB in progress, Intel Xeon Dual Processor 2GB)
- Linux (Red Hat 7.1, Red Hat 9.1, Fedora Core 4)
- 2 BSW 5.0 (1 installed, 1 BSW 4.2 still used)
- CASMI for map design
- Unix shell scripts + perl scripts for automatic data preparation + BPE (4.2+5.0) add-ons



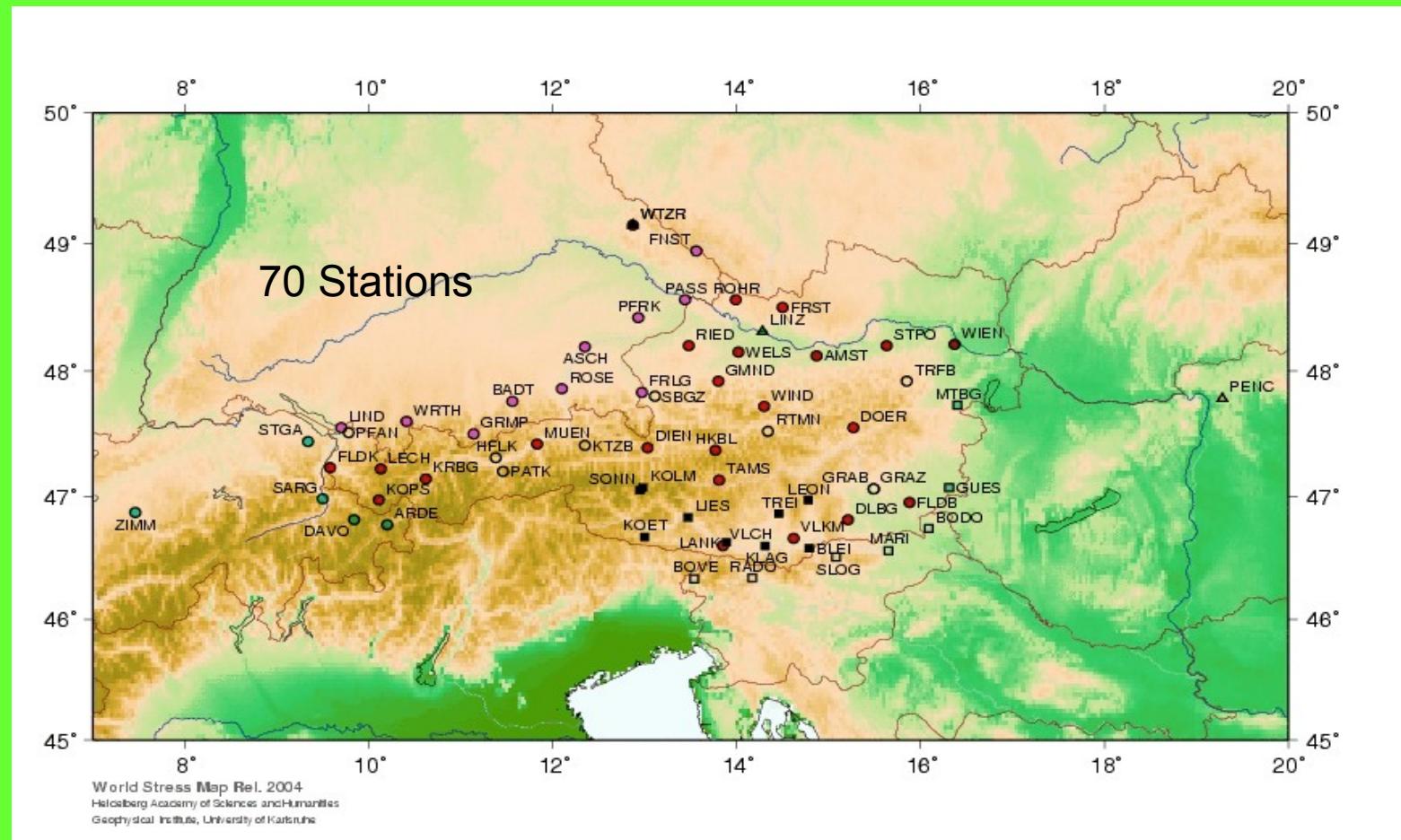
# EPN Sub-Network





# AMON

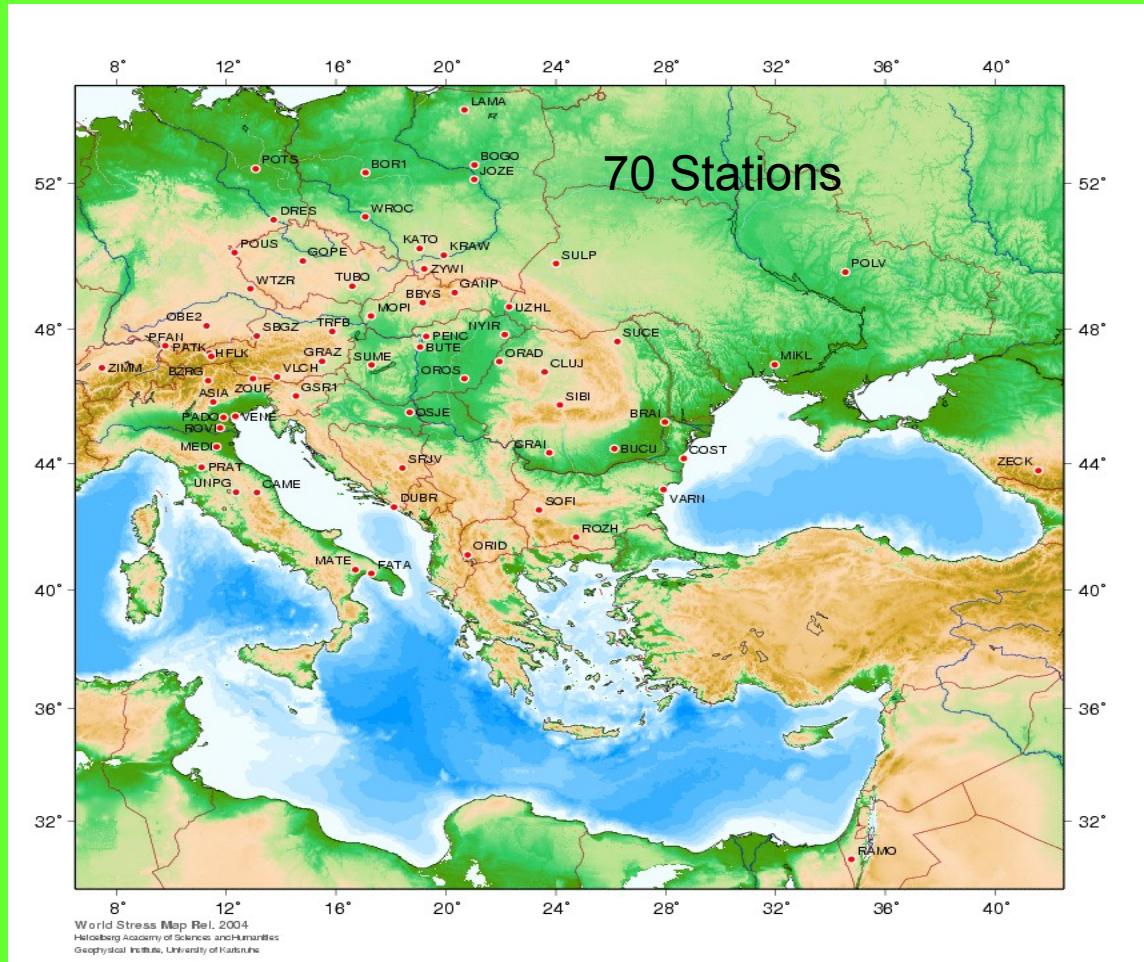
## Austrian Monitoring Network





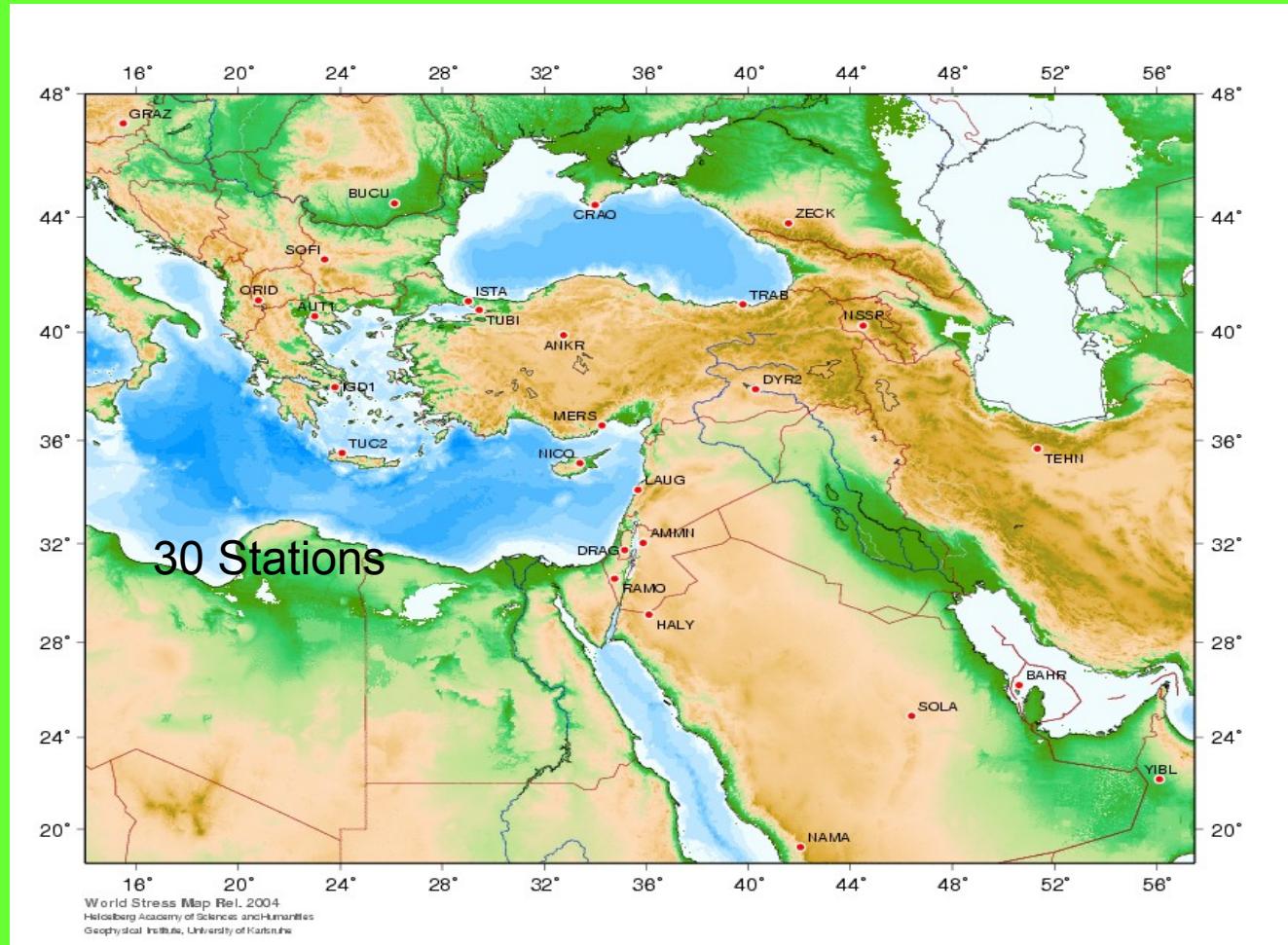
# ARE/CERGOP

Central European Geodynamics  
Austrian Research Extended





# MON - Monitoring Network of Anatolia and the Near East





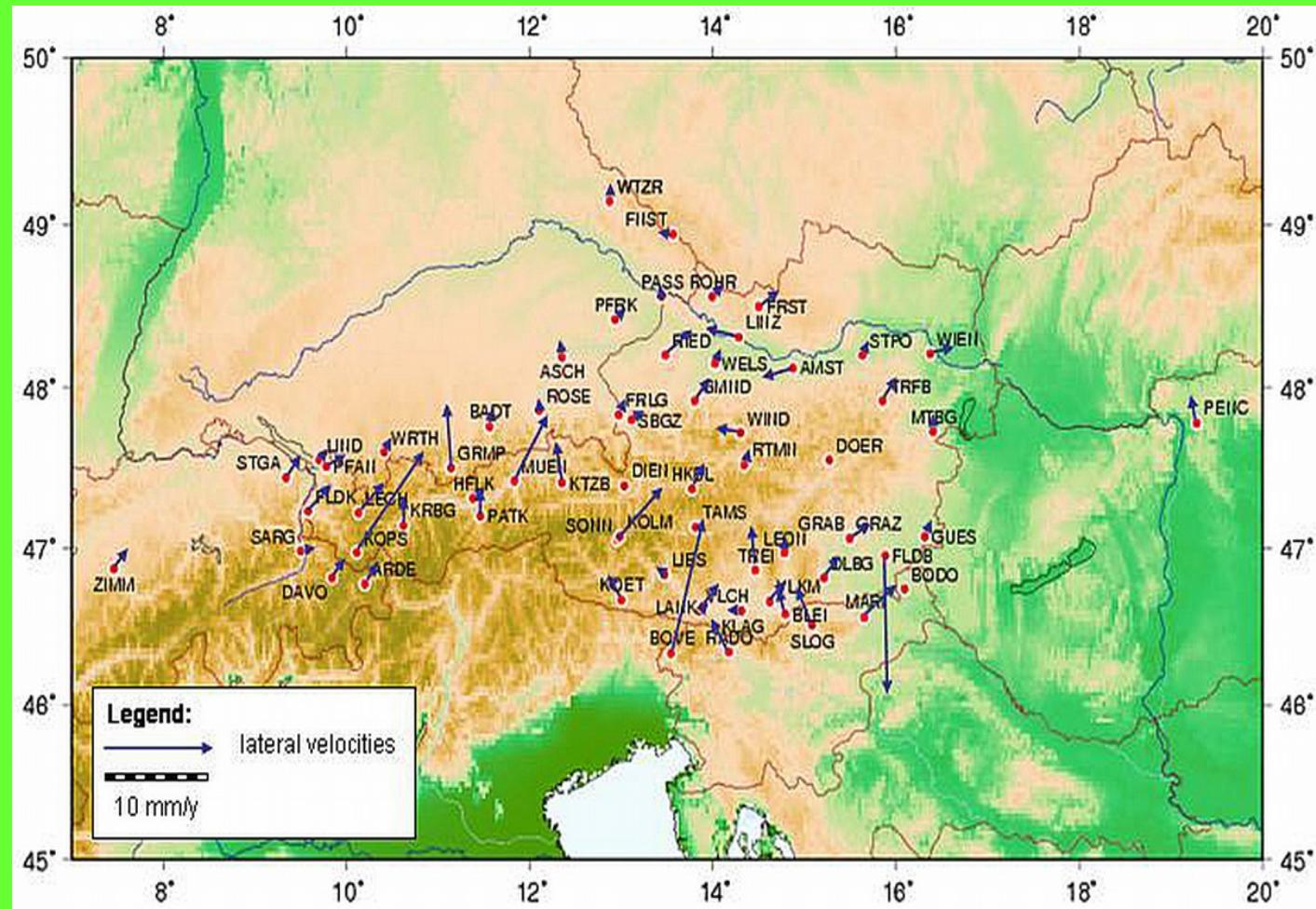
# Time Series



- 2001-2006 for AMON, CERGOP, MON
- EPN offsets applied, most of outliers not removed
- Minimum constraints to selected stations with ITRF2000 coordinates + EPN velocities
- AMON, CERGOP NUVEL substracted -> intraplate movements
- MON plate boundaries overview (Aegean, Anatolia)



# AMON Residual Velocities





# CERGOP Residual Velocities



**BEV**





# MON Velocities





# Other Topics



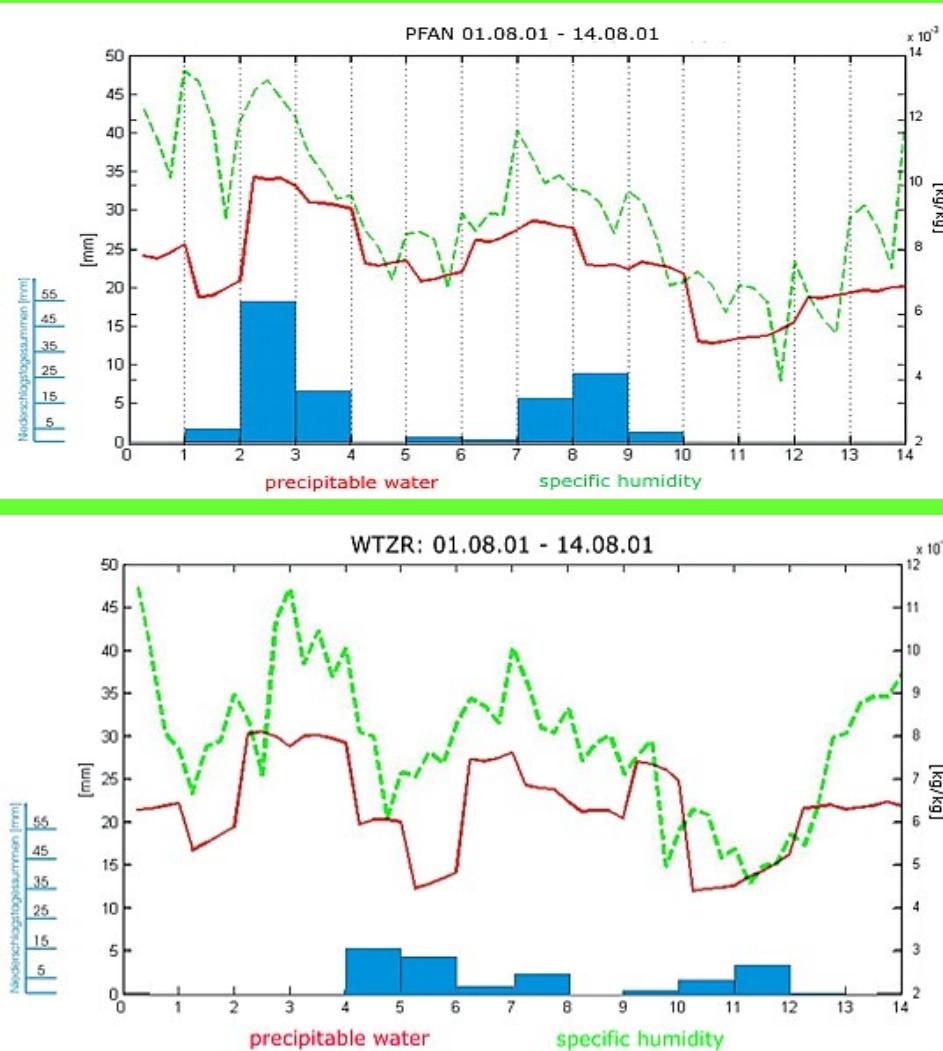
- GPS Campaigns for tectonic research  
(CEGRN, AGREF, Adria)
- Antenna tests – error in phase corrections
- Testing antenna calibration values
- Reconstruction of web page  
[gps.iwf.oeaw.ac.at](http://gps.iwf.oeaw.ac.at)
- Investigation of zenith delays started



Precipitable  
Water from  
GPS

Pressure and  
dry air  
temperature  
from NOAA  
and ECMWF

# Wet Delay Correlations



Precipitation:  
ZAMG (PFAN)  
DWD (Straubing)

Specific Humidity  
ECMWF



# Outlook 2006



- Reprocessing **campaigns** 1992-2004 for estimation of denser velocities in Eastern Alps and Northern Adria (Project needed)
- Reprocessing **MON** (more anchor stations, data before 2001, boundaries around Arabian Plate)
- Continuation of **CERGOP** adjustment with permanent stations (densification of velocity field)
- Starting modelling **zenith delays** within AMON
- NRT Contribution to **TOUGH** with AMON data
- **NRT-Monitoring** and –Warning for AMON sites better than 50 mm



# Thank You !

The OLG LAC Team

